



### **Staying Connected: Wi-Fi and Evolving Technology in Public Transportation**

Our digital, always-on world has given rise to a global culture that expects instant access to information. This desire to be connected doesn't stop, regardless of where people go.

To meet this demand, in most places – including our homes, workplaces, coffee shops and bars – wireless technology has allowed us to stay connected. But what about the journey between all of these locations?

For car and air travel, wireless internet, 3G, 4G and LTE technologies have supported this need for constant information and real-time communication. However, when it comes to train and other public transportation methods, there's still room for growth.

Public transportation has historically lagged behind other forms of transportation because keeping up to date with modern infrastructure or evolving technology to deliver on passenger expectations has not always been a top priority.

#### **What are passengers looking for?**

Passengers expect instant travel updates, constant access to Wi-Fi and little to no delay waiting for their train to arrive. They want to see and experience the latest technology, and enjoy convenient and safe travel. To achieve these demands, public transportation infrastructure – specifically the wireless networking components – needs to keep up. These technologies also can help train and subway operators improve fuel efficiency, travel reliability and passenger safety. Important amenities include:

- **Real-time information** – As passengers continue to expect immediate access to information, real-time passenger information systems are essential. These systems let passengers know if a train is delayed and provide the new, estimated arrival times.
- **Ticketless travel** – Printed paper tickets are a thing of the past. With smart phones and devices, combined with wireless technology, travellers can buy tickets, reserve their seat, and board using a virtual ticket.

## Staying Connected: Wi-Fi and Evolving Technology in Public Transportation

Author: Richard Weatherburn, vertical marketing manager - transportation, [Belden, Inc](#)

St. Louis Business Journal - Native Content Opportunity

9.19.16

- **Safety measures** – Cameras for video surveillance within trains are becoming more widespread. There are operational benefits, as well as employee and passenger benefits to help workers and travellers feel safer and more comfortable.

### The shift to wireless: What you need to know

While moving to more updated technologies, especially wireless capabilities, is essential for the success of public transportation – it won't be easy. Making the shift will require two big steps:

1. **Gathering the right team.** Bringing together the right experts within your company or organization to make informed decisions about transportation infrastructure is essential to creating systems that are expandable in the future. This could include engineering, IT, city government and operations teams.
2. **Installing the right technology.** While the needed technology is available all over the world, most of the equipment available is not suitable for installation on trains or other public transportation. This is because the environment is extremely challenging for electronic devices, both electrically and physically. To ensure devices can survive the rigors of use on trains, select equipment that has been tested to withstand certain circumstances, including resistance to fire and smoke, extreme vibration and exposure to wide temperature ranges.

To meet these needs, and remain competitive against other modes of transportation, public transportation leaders need to understand the benefits of wireless and other evolving technologies.

Want to know more about transportation infrastructure and what passengers are looking for? [Click here](#) to find additional information.

*Belden Inc. delivers a comprehensive product portfolio to meet mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With solutions targeted at reliable and secure transmission of growing data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world.*